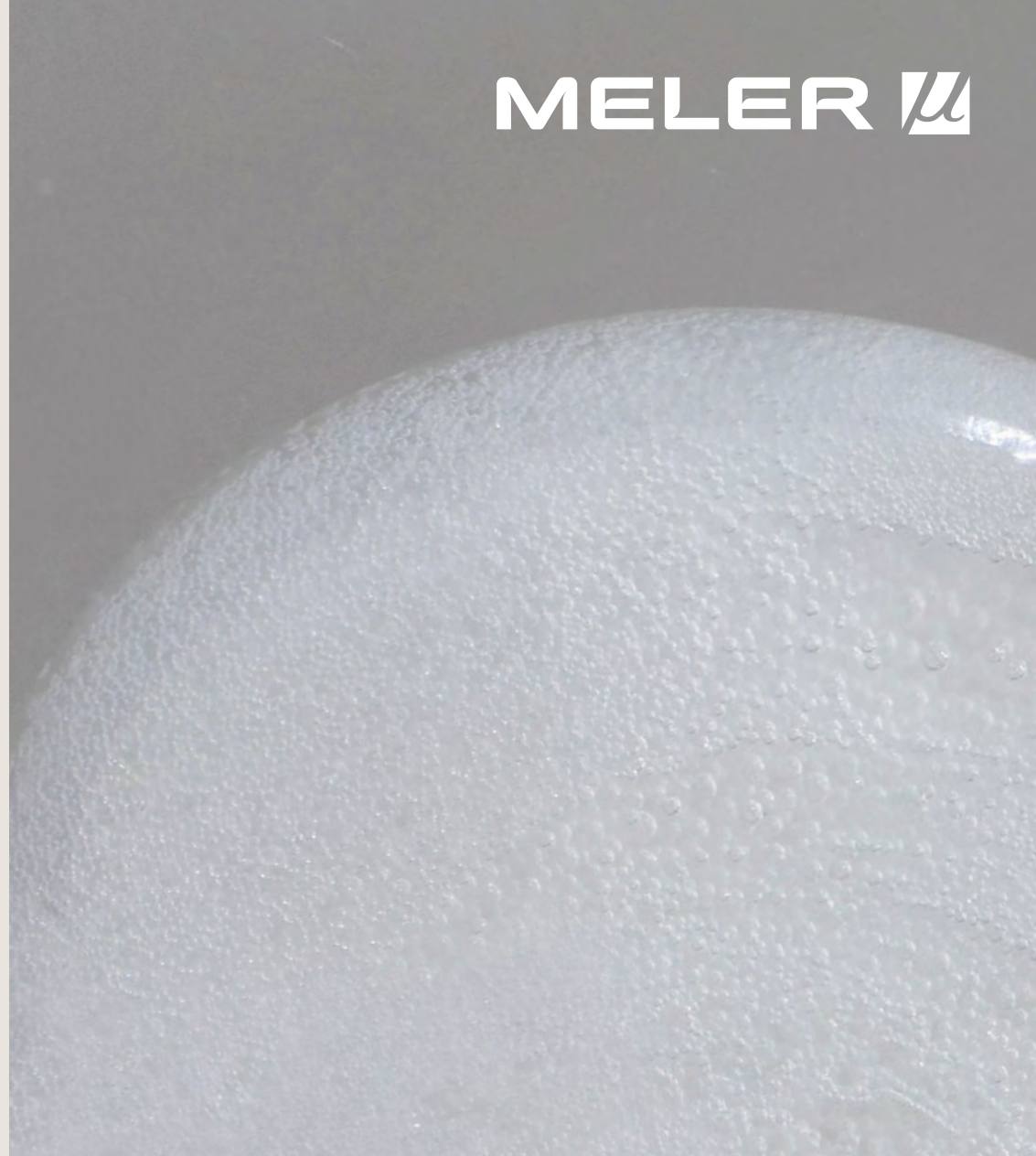


FOAM

TECHNOLOGY

MELER 



Your gluing solutions partner

meler.eu

The magic of
achieving more

GLUING WHAT MATTERS

01 **GLUING
TOMORROW**
Innovation can change
the world

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Perfecting adhesive
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SUPPORT**
Always by your side, no
matter where

06 **OUR
MAGIC**
Discover our magic



GLUING TOMORROW

CHANGE GENERATORS

Our way to be more sustainable is based on a **360-degree vision** that starts with product design. We innovate to achieve more productivity while requiring fewer resources and working on **energy-efficient, durable and robust solutions**.

Cutting-edge technology backed by real laboratory data drives us to look to the future by manufacturing solutions with an **increasingly longer life cycle**.

INNOVATION CAN CHANGE THE WORLD

At Meler we work everyday to make industrial **adhesive processes more sustainable for the planet**. A reduction in environmental impact supported by real solutions, such as **Foam Technology** made by Meler, which reduces the use of adhesive and improves product quality. Constant research that pays off by making available to the user the most efficient melters on the planet.

We research and invest because our business only improves if yours does.



GLUING KNOWLEDGE

FOAM Technology: the success of achieving more in the simplest way

The Meler team works tirelessly to optimize our customers' adhesive application processes and continue to bring together what matters most. In this search, we have found an innovative technology that allows us to achieve more, while needing less.



FOAM HOT MELT

It is a homogeneous mixture of gas bubbles (dispersed medium) blended in a hot melt adhesive.

ACHIEVING MORE

- Possibility to **create flexible joints** between materials
- Dosing on inclined or vertical surfaces
- Better **adaptation to the substrate** by correcting its irregularities or defects
- **Increases bead volume and contact area** with the substrate with less adhesive.
- Compatible with a wide variety of adhesives (**PSA, EVA, PA, PUR, PO**)

USING LESS

- **Adhesive savings (up to 50%)**
- **Optimum adhesion** with lower adhesive consumption
- **Lower energy consumption and optimization of resources**
- Lower **environmental impact**

SAVINGS OF
> UP TO 50%
OF ADHESIVE

ADVANTAGES



Reduction of adhesive consumption

FOAM TECHNOLOGY MEANS:

- FEATURES OPTIMIZATION
- ENERGY EFFICIENCY CONSUMPTION

A reflection of Meler's values as a company and a means to reduce the carbon footprint in the application of industrial adhesives.



High quality FOAM

High foam quality through an extremely simple to use and maintain system

Increased volume

After being applied, its volume increases, providing an airtight seal and filling up all cavities.



Fast adjustment

Only 3 parameters are set for equipment operation: temperature, gas & working pressure and pump speed.

Vertical application

Greater consistency on vertical surfaces.



PUR adhesives

Suitable to be used with reactive adhesives

FOAM HOT MELT: **INSIDE THE MELER LAB**

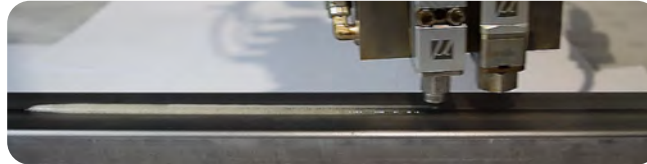
Foam application requires special equipment with several pumping stages to blend the gas and the adhesive thus, obtaining an homogeneous mixture.

TECHNICAL REQUIREMENTS OF A FOAM APPLICATION SYSTEM

- The pump should rotate at a speed above 15-20 rpm to ensure good mixing of components.
- The gas pressure should be as high as possible so that the bubbles are better mixed within the adhesive.
- Dual mode: possibility to work with pressure or rpm

KEY ASPECTS OF FOAM TECHNOLOGY :

- Adhesive type and viscosity
- Application temperature
- Nozzle size and type



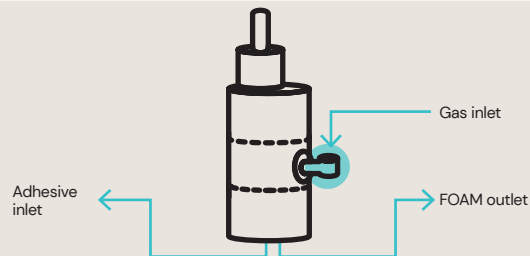
Meler's engineering team proposes a gas injection control system for the entire range of FOAM application units, which offers **high quality foaming with reduced energy consumption.**



CONVENTIONAL
MELTER
PUMP



PUMP FOR
ADHESIVE
FOAMING



GLUING TECH

Perfecting adhesive applications

AUTOMOTIVE



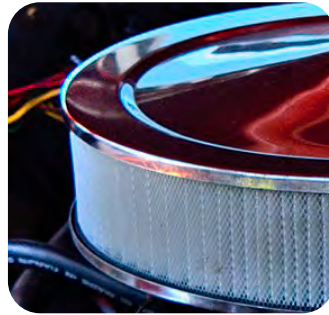
Foam technology is present in the robotic manufacturing lines for the assembly of different vehicle components such as **door panels or dashboards**.

WHITE LINE



The application of foam is one of the **most important production processes** in the manufacturing lines of the household appliances sector worldwide.

FILTERS



The application of Foam in filters is very common. The main goal in this kind of Foam adhesive application is **to reduce the use of adhesive while manufacturing the filter**.

MATTRESSES



Meler's innovative systems offer precise control on the application of Foam adhesive in the mattress industry while **decreasing the use of adhesive on the different layers** of the mattress.

PACKAGING



The application of Foam in the packaging industry offers a precise application on cans, plastic bottles and agricultural crates in order to **avoid additional wrapping and reduce the amount of adhesive**.

GLUING PRODUCTS

Melters

MICRON+ FOAM:

HIGHER EFFICIENCY, HIGHER PRODUCTIVITY

The growing market demand for foam applications has prompted new technological developments. Micron+ FOAM, the result of the union of two leading technologies, **the efficiency of Micron+ and the productivity of Foam.**

Micron+ FOAM gives you total control with its **advanced usability.** An adhesive care thanks to its **sequential zone heating and thermal homogeneity** of the tank provides you the versatility of a compact foam with very easy and simple maintenance.

DIMENSIONS:



MICRON+ FOAM 10



MICRON+ FOAM 20



TECHNICAL FEATURES:

- The first compact Foam melter with full accessibility
- Speed: Up to 150 rpm
- Number of hydraulic outlets: 4 (9/16 thread)
- Up to 5 electrical outputs
- Temperature up to 200 °C (230 °C optional)

FOR FOAM APPLICATIONS WITH MEDIUM-LOW ADHESIVE CONSUMPTION OR WITH A SMALL WORKING SPACE.



ADVANTAGES:

MAXIMUM ENERGY EFFICIENCY	MAXIMUM ACCESSIBILITY	IMPROVES PROCESS PERFORMANCE	GREATER MOBILITY
FULL CONNECTIVITY	≤50% ADHESIVE SAVINGS	FOAM APPLICATION	

PS20 NS+ FOAM

CREATED FOR FOAM APPLICATIONS OF PUR

When production demand requires a continuous flow of application, the system can't stop. Meler's range of drum unloaders offers a **non-stop system for 20 kg PUR blocks** with **full integration for Industry 4.0** thanks to its electronic platform.

Now, the optimized melting of the PS20 NS+ 20 is adapted to add the productivity of the **Non-Stop system** to the advantages of foam adhesive application.

DIMENSIONS:



TECHNICAL FEATURES:

- Up to two pumps installed
- Speed: Up to 150 rpm
- Number of hydraulic outlets: 2 per pump
- Up to 6 electrical outlets
- Temperature: Up to 200 °C

FOR 20KG
BLOCKS FORMAT

ADVANTAGES:

 REDUCES MAINTENANCE COSTS	 FACILITATES USE AND INSTALLATION	 MAXIMUM ACCESSIBILITY	 WIFI CONNECTION	 ADHESIVE SAVINGS	 FOAM APPLICATION
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MACRO FOAM

TO THINK BIG

The Macro Foam series for melting, foaming and pumping hot melt and PUR adhesives is available in different tank capacities: **35, 50 or 120 litres**.

These large units are designed for both continuous and intermittent applications, but have in common the **high adhesive consumption**. There is also a **specific version for reactive adhesives**.

TECHNICAL FEATURES

- Up to 4 foam pumps installed in the same melting unit PUR version with watertight cover
- N° of hydraulic outlets: 2 per pump
- Up to 5 electrical outputs
- Temperature range: Up to 200°C

FOR FOAM APPLICATIONS
WITH MEDIUM-HIGH
ADHESIVE CONSUMPTION

DIMENSIONS:

MACRO FOAM 50



TWO AVAILABLE MODELS (3 TANKS SIZES):

35, 50 > 1.080 x 510 x 1.600 mm

120 > 1.080 x 875 x 1.600 mm



ADVANTAGES:



SUMMA FOAM/ FOAM STATION:

TO ADD TO THE BENEFITS OF FOAM

Summa Foam is a **tankless station** that converts an adhesive previously melted in another melting unit into foam.

This equipment allows the advantages of FOAM to be added to installations that were not initially configured for it.

The station offers a stable mixture of adhesive and gas resulting in a **direct application**, without recirculation. It has Meler's electrical platform that allows perfect integration into automated manufacturing lines, improves traceability and the quality of the final product.

TECHNICAL FEATURES:

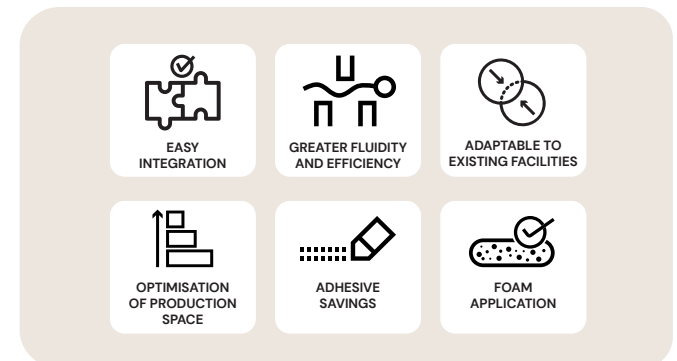
- High pumping capacity: installation of up to two foam pumps (compatible with 4 different pump types)
- Speed: 10-80 rpm
- Number of hydraulic outlets: 1 (9/16 thread)
- 2 electrical outlets
- Temperatures up to 200 °C

DIMENSIONS:



COMPLEMENTARY EQUIPMENT
FOR ADHESIVE FOAMING IN
HOT MELT INSTALLATIONS

ADVANTAGES:



GLUING PRODUCTS

Applicators

SDA APPLICATOR

THE PERFECT PARTNER FOR ADHESIVE APPLICATION IN INDUSTRY 4.0

The Smart Dosing Applicator (SDA) is a **connected applicator with volumetric controller**, designed for robotic Industry 4.0 applications.

It is capable of performing set-point changes in less than 1" and reporting all job data in real time for **full traceability control**.

TECHNICAL FEATURES:

- Accuracy rate and repeatability
- Line speed: 0/600 mm/s
- Flow rate: min. 6g/min – Max. 400g/min (depending on pump type)
- Quick changes in the flow rate between bead applications during the process

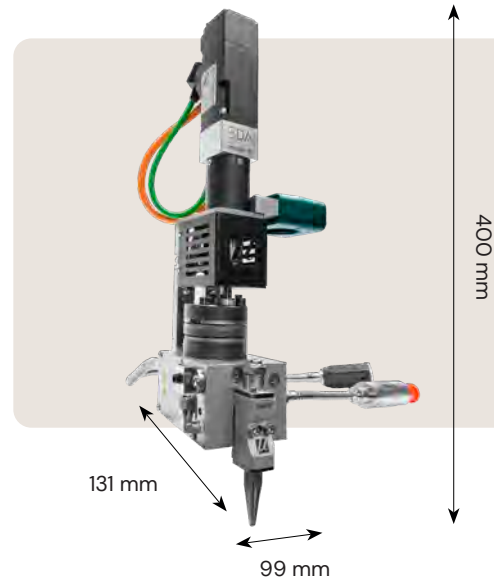
TYPE OF APPLICATIONS:

Robotic



SET-POINT CHANGES IN LESS THAN 1 SECOND

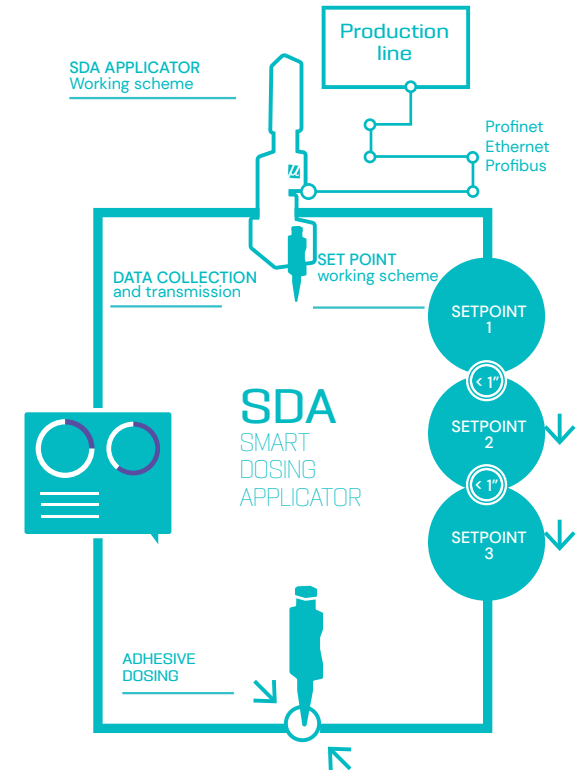
DIMENSIONS:



4,5kg

‘THE LIGHTEST SMART APPLICATOR ON THE MARKET’

IMPLEMENTATION CYCLE



ADVANTAGES:

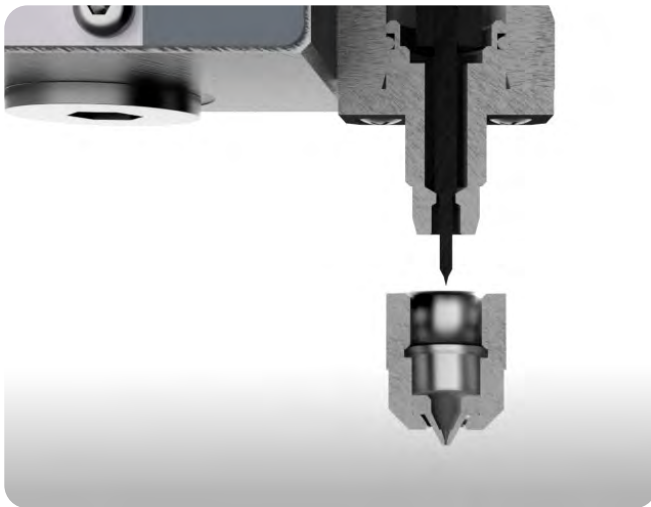
PERFECT FOR 4.0 INDUSTRY	PROCESS AUTOMATION	ADHESIVE FLOW ACCURACY	CONFIGURABLE ON CUSTOMER'S REQUEST	GREATER RELIABILITY	PERFECT FOR ROUTING	WIDE RANGE OF COMMUNICATION PROTOCOLS
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ZERO CAVITY MODULS AND NOZZLES

PERFECT DISPENSING

One of the keys to achieving a perfect stroke with foam adhesive is the use of nozzles and modules that allow a '0-cavity' closure.

This system is designed so that **the needle closes at the point where the adhesive exits the nozzle**, thus avoiding any remaining foam glue at the tip of the nozzle.



MODULS

The 0 cavity modules are available in two pneumatically controlled versions:

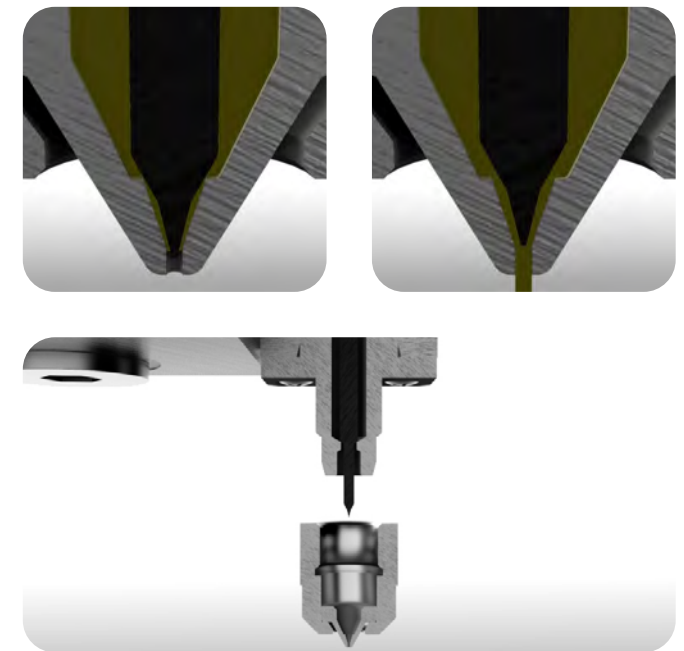
- **Air Opening–Air Closing**
(double acting AOAC)
- **Air Opening–Spring Closing**
(simple effect AOSC)

Both models guarantee an optimal cost of adhesive flow.



0-CAVITY NOZZLES

The "0-cavity" nozzles can be of fixed or removable type and are available in a wide range of diameters, from \varnothing 0.20 to \varnothing 1.00.



APPLICATORS COMPATIBLE WITH ZERO-CAVITY SYSTEM

MU APPLICATOR

BEAD

With integrated filter, which largely prevents nozzle blockage and production stoppages. production stops.



NC APPLICATOR

BEAD

Fully configurable to customer demand and with total compatibility in the market. the market.



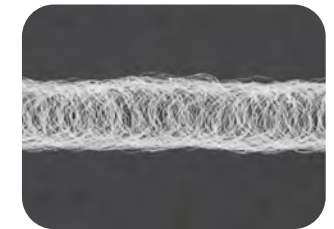
NC ECA-ECAI APPLICATOR

SWIRL

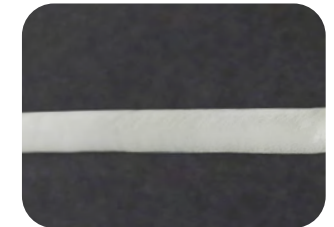
Small dimensions and light weight. Version with internal heating (AC) or external heating (CI).



SWIRL WITH FOAM



BEAD OF FOAM



GLUING PRODUCTS

Hoses







HOSES

ARION Hoses

EMPOWERING HOSES

Arion, Meler's hose solution was created to boost your production capacity, the first specialist in improving the performance and efficiency of your industrial adhesive transport processes, which thanks to its 3FORCE technology, will reveal a new **versatile, efficient and driving way** to improve your results, systems and processes.

ADVANTAGES:

 REDUCES MACHINE DOWNTIME	 PROCESSES AUTOMATION	 ≤50% ADHESIVE CONSUMPTION REDUCTION	 TORSIONAL AND BENDING STRESS
 PERFECT FOR 4.0 INDUSTRY	 CONTINUOUS PRODUCTION	 FOAM ADHESIVE	 SUSTAINABLE SOLUTION



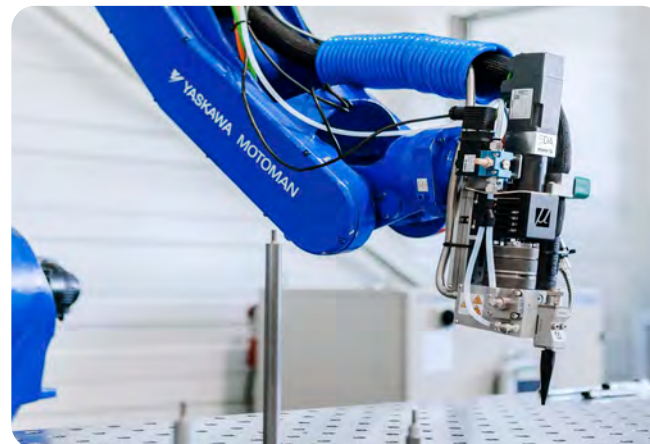
ARION Wave
For moving FOAM applications

ROBOTIC APPLICATIONS

Movement on all the productive processes is becoming more frequent and necessary. Arion Wave hose has been specifically designed for Foam applications that require movement.

AIRTIGHT-SEAL HOSE

Arion Wave becomes the perfect hose for daily production without unnecessary stoppages. This model makes its difference because of its airtight sealed condition that preserves the air inside the hose.



VERSIONS

ARION Handy Wave hose on demand. A solution created altogether with the Raptor Handy applicator focused on manual foam applications.



MELER SUPPORT

Always by your side, no matter where you are

CAN I USE FOAM TECHNOLOGY IN MY PRODUCTION?

Meler is firmly **committed to extending the use of foam technology** as a strategy for improving our business and our customers' business.

All the production advantages mentioned, especially **energy efficiency and resource optimisation**, reflect Meler's values as a company and its corporate commitment to the environment. Meler's team of engineers, as experts in the profitability of foam applications, will be able to advise you to assess the suitability of this technology for your way of working.



REAL-TIME GLOBAL
TECHNICAL ASSISTANCE



GLOBAL STOCK ALWAYS READY



CUSTOMER TRAINING



EASY MAINTENANCE



DOCUMENTATION

“

*FOAM technology
is an innovation
that can change
the world.*



OUR MAGIC

Discover our magic

A TIRELESSLY DREAMING TEAM:



We look for solutions where no one has found them before until we find them. Always thinking about the next step so you can discover new ways to drive what really matters to you.

ALWAYS BEING HUMANELY EMPATHETIC:



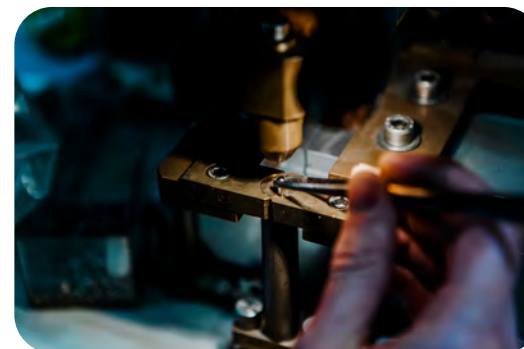
Walking by your side, we care about what matters to you. **We listen to you** and attend to all your concerns, understanding that we are people working with people, that your success is our success.

WITH A RESPONSIBLY COURAGEOUS ATTITUDE:

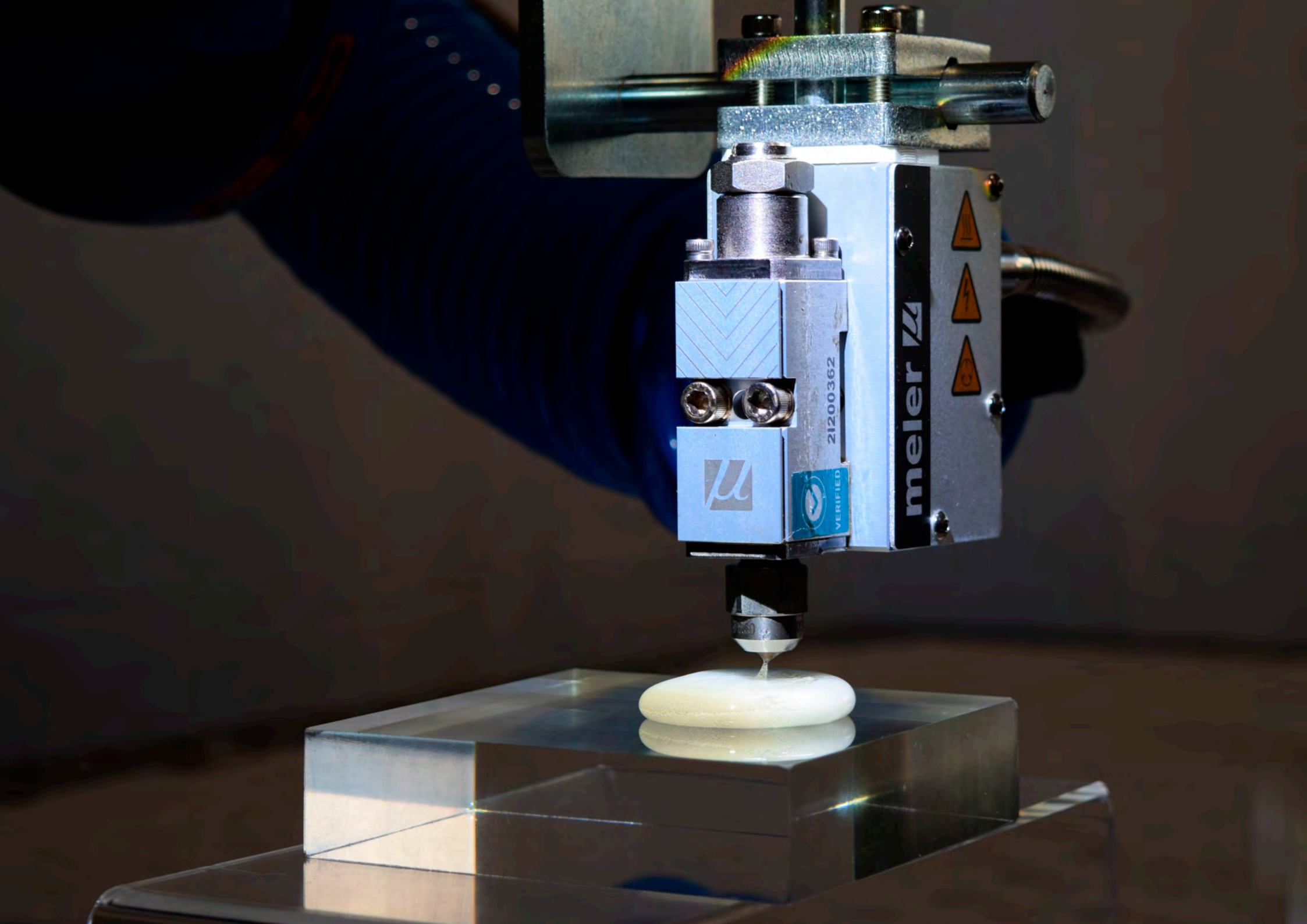


We are **not afraid of challenges**, we face them with the firm conviction that we can overcome them, thanks to our experience we know the paths we can and cannot take together.

WITH SOPHISTICATED AND INGENUOUS SOLUTIONS:



Because sometimes the most innovative solution is not the most complex, because we are **capable of providing creative solutions** that take care of the smallest detail so that everything works as it should.



meler

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VERIFIED



The magic of
achieving more



MELER 

GLUING
WHAT
MATTERS

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